

IN THE CLAIMS**BEST AVAILABLE COPY**

1. (currently amended) An on-line purchase and load (OPAL) server for performing a transaction over a network using a virtual smart card, said OPAL server comprising:
 - a virtual smart card database having a plurality of records, each record including a virtual card identifier, and a balance, ~~a currency code, and a transaction log~~ corresponding to a single virtual smart card;
 - a hardware security module;
 - a smart card emulator that receives smart card commands and processes said commands in conjunction with said virtual smart card database and said hardware security module; and
 - a pseudo card reader module that receives said smart card commands over said network and relays said commands to said smart card emulator, whereby said OPAL server performs a transaction over said network using one of said records in said virtual smart card database.
2. (original) An OPAL server as recited in claim 1 wherein said virtual card database further includes purchase algorithm identifiers, and wherein said hardware security module includes a plurality of purchase algorithms that are identified for use by one of said purchase algorithm identifiers, whereby said hardware security module may be used to perform cryptographic functions associated with a purchase.
3. (original) An OPAL server as recited in claim 1 further comprising:
 - a user verification module that verifies a user accessing said OPAL server and generates a user identifier, said user identifier being suitable to identify one of said virtual smart card records in said card database.
4. (original) An OPAL server as recited in claim 1 wherein said smart card emulator and said pseudo card reader module are implemented as a single software module.

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5. (original) An OPAL server as recited in claim 1 wherein said network is an internet over which said OPAL server communicates with a merchant server and a payment server to transact a purchase.

6. (original) An OPAL server as recited in claim 1 wherein said network is an internet over which said OPAL server communicates with a bank server and a load server to load value onto said virtual smart card.

7. (original) An OPAL server as recited in claim 1 wherein said network is an internet over which said OPAL server communicates with a web server and an authentication server to authenticate a user.

8. (original) An OPAL server as recited in claim 1 wherein said OPAL server communicates over said network with a payment gateway for funding account authorization and clearing.

Claims 9-33 (cancelled)

34. (previously presented) An OPAL server as recited in claim 1 wherein said smart card emulator is suitable for retrieving one of said records from said virtual smart card database, increasing or decreasing said balance of said record, and then returning said record to said virtual smart card database.

35. (previously presented) An OPAL server as recited in claim 1 wherein each record of the virtual smart card database also includes a funding account number wherein the funding account number identifies an account that contains a monetary amount that can be loaded onto a virtual smart card.

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36. (previously presented) An OPAL server as recited in claim 1 wherein the OPAL server is further configured to receive a purchase request message from a client terminal, wherein the purchase request message indicates a good or service to be purchased by a user, a user identifier, and a user password.
37. (previously presented) An OPAL Server as recited in claim 36 wherein the OPAL server is further configured to send a draw request message to a payment server, wherein the draw request message indicates an amount of money required to purchase the good or service and a merchant identifier.
38. (previously presented) An OPAL Server as recited in claim 37 wherein the OPAL server is further configured to receive a debit command from the payment server, wherein the debit command indicates an amount of money to debit from a respective virtual smart card.
39. (previously presented) An OPAL Server as recited in claim 38 wherein the smart card emulator is configured to debit itself in response to the debit command by the amount of money indicated in the debit command.
40. (previously presented) An OPAL Server as recited in claim 38 wherein the OPAL server is further configured to send a debit response message to the client terminal, wherein the debit response message informs the user either that the amount of money has been debited from the smart card emulator or that money has not been debited from the smart card emulator due to a lack of sufficient funds.

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41. (currently amended) An on-line purchase and load (OPAL) server for performing a transaction over a network using a virtual smart card, said OPAL server comprising:

a virtual smart card database having a plurality of records, each record including a virtual card identifier, and a balance, ~~a currency code, and a transaction log~~ corresponding to a single virtual smart card;

a hardware security module;

a smart card emulator that receives smart card commands and processes said commands in conjunction with said virtual smart card database and said hardware security module, the smart card emulator also configured to send a load request message to a load server, wherein the load request message indicates a virtual smart card identifier and a load amount for a respective virtual smart card, the load amount indicating an amount of money to load onto the respective virtual smart card; and

a pseudo card reader module that receives said smart card commands over said network and relays said commands to said smart card emulator, whereby said OPAL server performs a transaction over said network using one of said records in said virtual smart card database.

42. (previously presented) An OPAL server as recited in claim 41 wherein the OPAL server is configured to receive a load command from a load server wherein the amount of money indicated in the load request message is loaded onto the respective virtual smart card.

43. (previously presented) An OPAL server as recited in claim 42 wherein the smart card emulator is configured to send a load response message to a client terminal, wherein the load response message informs a user that the amount of money has been loaded onto the respective virtual smart card.